CLAIMS

1. A resurfacing disk removably mountable to a downwardly extending rotatable disk mount of a conventional rotary floor resurfacing machine to remove material from a floor surface, comprising:

a substantially rigid upper disk having respective upper and lower surfaces;

a plurality of resilient replaceable grommets each including an upper end adapted to removably mount to the disk mount and a lower end mounted to said upper surface of said upper disk; and

at least one floor resurfacing device removably mounted to said lower surface depending downwardly therefrom adapted for removing the material from the floor surface as said resurfacing disk moves thereon, said grommets deforming to permit said resurfacing devices to more closely follow contours of the floor surface.

2. The resurfacing disk defined in Claim 1 further comprising a resiliently deformable lower disk mounted to the lower surface of the upper disk, the floor resurfacing device being removably mounted to a lower surface of said lower disk depending downwardly therefrom, said lower disk deforming to permit said floor resurfacing devices to more closely follow contours of the floor surface.

3. The resurfacing disk defined in Claim 2 in which the floor resurfacing devices each comprise a sanding disk which includes a sandpaper disk having a rough sanding surface for engaging the floor surface and a smooth back surface removably affixable to the lower surface of the lower disk.

4. The resurfacing disk defined in Claim 2 in which the floor resurfacing devices are removably affixable to the lower surface of the lower disk using respective disks of an interconnectable hook and a loop fastener material affixed the lower surface of the lower disk and to a back surface of the floor resurfacing devices.

5. The resurfacing disk defined in Claim 4 in which the disk of hook fastener material is affixed to the back surface of the floor resurfacing devices and the disk of loop fastener material is affixed to the lower surface of the lower disk.

6. The resurfacing disk defined in Claim 1 in which the floor resurfacing devices comprise rotary cutters each including a bracket mountable to the lower surface of the lower disk, and a generally cylindrical cutter rotatably mounted to said bracket having a plurality of radially extending cutting teeth disposed about a rotational axis which is oriented radially outwardly from the resurfacing disk axis so as to rotate therearound during resurfacing disk rotation.

7. The resurfacing disk defined in Claim 6 in which the brackets include a base plate and a pair of downwardly dependent tabs having respective holes therethrough, the cylindrical cutter being mounted thereto on an axle which extends through said tabs and said cylindrical cutter.

8. The resurfacing disk defined in Claim 7 in which the axle comprises a rod which extends through the holes of the tabs, said rotary cutter being secured thereon by a fastener attached to said rod.

9. The resurfacing disk defined in Claim 6 in which the rotary cutters include a plurality of individual cutting wheels having a toothed outer periphery and a central bore adapted to closely receive the axle therethrough, and a plurality of spacers having a center bore adapted to closely receive said axle, said spacers being interposed between said cutting wheels to provide separation of said cutting wheels, said cutting wheels and said spacers being rotatably disposed along said axle.

10. The resurfacing disk defined in Claim 9 in which the spacers comprise flat washers.

11. The resurfacing disk defined in Claim 9 in which the cutting teeth are made of a material chosen from the set consisting of hardened steel and carbide.

12. The resurfacing disk defined in Claim 9 in which the rotary cutters are made from sheet steel.

13. A resurfacing disk removably mountable to a downwardly extending rotatable disk mount having a plurality of downwardly open mounting pin holes of a rotary floor resurfacing machine to remove material from a floor surface, comprising:

a substantially rigid upper disk having respective upper and lower surfaces, said upper surface which includes a plurality of counterbored holes;

a plurality of resilient replaceable grommets each including a longitudinal bore, an upper end adapted to removably mount to the disk mount, a middle flange of a larger outer size than the upper end thereof, and a lower end adapted to removably mount to said upper surface of said upper disk, said middle flange and said lower end being closely received in said counterbored holes and retained thereto by at least one retaining device comprising a retaining plate with a plurality of holes which correspond to said counterbored holes in said upper disk adapted to closely pass said upper ends of said grommets, said retaining plate being removably mountable to said upper surface of said upper disk to retain said grommets to said upper disk;

a plurality of mounting pins each including an upper end adapted to closely fit within a corresponding mounting pin hole of the disk mount and a

lower end detachably engageable within said longitudinal bore of said grommets;

at least one floor resurfacing device removably mounted to said lower surface depending downwardly therefrom adapted for removing the material from the floor surface as said resurfacing disk moves thereon; and

wherein said grommets deforming to permit said resurfacing devices to more closely follow contours of the floor surface.

14. The resurfacing disk defined in Claim 13 further comprising a resiliently deformable lower disk mounted to the lower surface of the upper disk, the floor resurfacing device being removably mounted to a lower surface of said lower disk depending downwardly therefrom, said lower disk deforming to permit said floor resurfacing devices to more closely follow contours of the floor surface.

15. The resurfacing disk defined in Claim 14 in which the lower disk comprises a semi-rigid, hard sponge.

16. The resurfacing disk defined in Claim 14 in which the floor resurfacing devices each comprise a sanding disk which includes a sandpaper disk having a rough sanding surface for engaging the floor surface and a smooth back surface removably affixable to the lower surface of the lower disk.

17. The resurfacing disk defined in Claim 14 in which the floor resurfacing devices are removably affixable to the lower surface of the lower disk using respective sheets of an interconnectable hook and a loop fastener material affixed the lower surface of the lower disk and to a back surface of the floor resurfacing devices.

18. The resurfacing disk defined in Claim 14 in which the retaining plate includes a centering post which closely fits within a centering hole of the upper disk, there are four mounting pins and grommets for use with disk mounts having four corresponding mounting pin holes disposed in a square pattern, and the upper disks include four pin receiving holes in a square pattern corresponding to the disk mount, the mounting pins, the pin receiving holes of the disk mounts, and the longitudinal bore of the grommets are all of a circular cross-section.

19. The resurfacing disk defined in Claim 14 in which the lower ends of the mounting pins include an annular groove adapted to receive an external retaining clip, and the lower ends of the grommets are slotted to accommodate said retaining clips.

20. The resurfacing disk defined in Claim 13 in which the floor resurfacing devices comprise rotary cutters each including a bracket mountable to the lower

surface of the lower disk, and a generally cylindrical cutter rotatably mounted to said bracket having a plurality of radially extending cutting teeth disposed about a rotational axis which is oriented radially outwardly from the resurfacing disk axis so as to rotate therearound during resurfacing disk rotation.

21. The resurfacing disk defined in Claim 20 in which the brackets include a base plate and a pair of downwardly dependent tabs having respective holes therethrough, the rotary cutter being mounted thereto on an axle which extends through said tabs and said rotary cutter.

22. The resurfacing disk defined in Claim 20 in which the rotary cutters include a plurality of individual cutting wheels having a toothed outer periphery and a central bore adapted to closely receive the axle therethrough, and a plurality of spacers having a center bore adapted to closely receive said axle, said spacers being interposed between said cutting wheels to provide separation of said cutting wheels, said cutting wheels and said spacers being rotatably disposed along said axle.

23. The resurfacing disk defined in Claim 22 in which the cutting teeth are made of a material chosen from the set consisting of hardened steel and carbide.